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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,412	06/23/2000	Melvin Richard Zimowski	ST9-99-080	9095

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EXAMINER

SHAW, JOSEPH D

ART UNIT PAPER NUMBER

2141

DATE MAILED: 07/14/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,412

Applicant(s)

ZIMOWSKI, MELVIN RICHARD

Examiner

Joseph D Shaw

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 2, line 15, an unnecessary return carriage is present. Appropriate correction is required.
2. The use of the trademarks UNIX, DB2, OS/390, Internet Explorer, Netscape Navigator, IBM's HTTP Server, and COBOL have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - 4.1. The term "coordinated fashion" in claim 1 is a relative term which renders the claim indefinite. The term "coordinated fashion" is not defined by the claim,

the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claim should be rewritten to describe what type of coordinated fashion.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1, 2, 4, 7, 13, 14, 16, 19, 25, 26, 27 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Hon et al. (6,185,608).

- 7.1. As per claims 1, 13, and 25, Hon teaches a system that contains a data storage device connected to a computer (col. 3, lines 23-24) for determining if a web page is to be cached (col. 3, lines 41-46) wherein the web page references

objects from the data storage (col. 3, lines 23-26); storing the referenced objects in one or more data stores (database)(col. 3, lines 23-34); caching web pages (col. 3, lines 23-32); and managing the cached web pages and referenced objects in a coordinated fashion by triggering the cache whenever the data in the data store has been changed (col. 3, lines 32-36).

7.2. As per claims 2, 14, and 26, Hon discloses the claimed invention as described above and furthermore teaches of purging the cache copies of pages affected by the change to the stored data (deletion)(col. 3, lines 32-36).

7.3. As per claims 4, 16, and 27, Hon discloses the claimed invention as described above and furthermore teaches receiving a request to generate a dynamic web page (col. 3, lines 41-46); and retrieving data and placing the data in a dynamically generated web page (col. 3, lines 49-50).

7.4. As per claims 7, 19, and 31, Hon discloses the claimed invention as described above and furthermore teaches deciding if a page should be cached based on if it is already cached (caching directive)(Fig. 1).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2141

9. Claims 3, 15, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hon et al. in view of Mattis et al. (6,209,003).

9.1. As per claims 3, 15, and 27 Hon discloses the claimed invention as described above. However, Hon does not explicitly teach deleting referenced objects when a web page is purged from the cache. Mattis teaches a method of deleting fragments (objects) that are not active (col. 21, lines 59-68, col. 22, lines 1-7), where active is determined to be referenced by a live web page. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the method of deleting inactive objects as taught by Mattis in the system of Hon because such an improvement would help prevent the degradation of the cache object store (col. 2, lines 21-27).

10. Claims 5, 6, 8, 9, 10, 17, 18, 20, 21, 22, 29, 30, 32, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hon et al. in view of Chamberlain et al. (6,408,360).

10.1. As per claims 5, 6, 17, 18, 29, and 30 Hon discloses the claimed invention as described above. However, Hon does not explicitly teach receiving an administrative request for the deletion of data or linked objects and processing the deletion. Chamberlain teaches a method that allows for caching to be overridden by the information author, page creator, or system designer (administrator) by adjusting a CacheUntil parameter, thus controlling when the data is to be deleted (Abstract, col. 4, lines 60-64, cols 14-15, lines 66-67, 1-6). However, Chamberlain does not explicitly teach the actual process of data being

Art Unit: 2141

deleted after administrative input. It is the position of the examiner, however, that such a process is conventional. Official notice is taken. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the method of administrator-provided input deletion as taught by Chamberlain, and actual deletion of the file, because such a process is conventional, in the system of Hon because administrative override of the system allows maximum flexibility for website design and implementation as taught by Chamberlain (col. 15, lines 7-9).

- 10.2. As per claims 8, 9, 20, 21, 32, and 33 Hon discloses the claimed invention as described above. However, Hon does not explicitly teach associating an expiration timestamp with a web page and further automatically deleting the page when the timestamp precedes the current date/time. Chamberlain teaches a time variant bit and CacheUntil time/date associated with each file (col. 10, lines 1-5, col. 11, lines 8-18). Furthermore, Chamberlain teaches removing a cached response from the cache after the lifespan of the response has expired (col. 12, lines 47-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include time/date association with each file and removal of expired responses as taught by Chamberlain in the system of Hon because the associated time/date provides a time/date after which the page is stale and no longer needs to be cached as taught by Chamberlain (col. 10, lines 1-5, col. 11, lines 15-18) and thus are removed to free up cache space.

- 10.3. As per claims 10, 22, and 34, Hon discloses the claimed invention modified by Chamberlain as described above. Furthermore, Chamberlain teaches a web page becoming "stale" (old, incomplete) in the cache when a source part (object) has been modified (deleted)(col. 12, lines 38-42). For this to happen, the object must be have been modified prior to the page being deleted. It would have been obvious to one of ordinary skill in the art at the time the invention was made to reverse this process and delete the web page first because it would ensure a "stale" web page as taught by Chamberlain will never exist in the cache and displayed for the client.
11. Claims 11, 12, 23, 24, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hon et al. in view of Chamberlain et al. as applied to claims 8, 9, 20, 21, 32, and 33 above, and further in view of Arnold (6,275,848).
- 11.1. As per claims 11, 23, and 35, Hon discloses the claimed invention modified by Chamberlain as described above. However, the Hon/Chamberlain system does not explicitly teach receiving an administrative request to delete all cached web pages that meet a certain criteria specified by the administrator and furthermore deleting the cached web pages. Arnold teaches a method of administrator-supplied criteria for the deletion of attachments from a server (col. 6, lines 22-27). However, Arnold does not explicitly teach the actual process of data being deleted after administrative-specified criteria. It is the position of the examiner, however, that such a process is conventional. Official notice is taken. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to include the method of administrator-specific criteria for deletion as taught by Arnold, and actual deletion of the file, because such a process is conventional, in the Hon/Chamberlain system because it would prevent the unnecessary occupation of valuable server space as taught by Arnold (col. 5, lines 3-6).

- 11.2. As per claims 12, 24, and 36, Hon discloses the claimed invention modified by Chamberlain and further by Arnold as described above. Furthermore, Chamberlain teaches a web page becoming "stale" (old, incomplete) in the cache when a source part (object) has been modified (deleted)(col. 12, lines 38-42). For this to happen, the object must be have been modified prior to the page being deleted. It would have been obvious to one of ordinary skill in the art at the time the invention was made to reverse this process and delete the web page first because it would ensure a "stale" web page as taught by Chamberlain will never exist in the cache and displayed for the client.

Conclusion


12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 12.1. Challenger et al. (6,256,712) teaches methods for maintaining and updating caches involving dynamic web pages.
- 12.2. Challenger et al. (6,266,742) teaches cache replacement algorithms.

- 12.3. Jawahar et al. (6,298,356) teaches dynamic cached web pages with expiration dates.
- 12.4. Challenger et al. (6,338,117) teaches coordinated hierarchal caching in a web environment.
- 12.5. Byrne et al. (6,347,312) teaches cached responses to search queries in a relational database.
- 12.6. Batchelder et al. (6,351,767) teaches a system for determining the cacheability of dynamic web pages and caching them.
- 12.7. Crow et al. (6,393,526) teaches a caching system where embedded objects are cached and pre-fetched to ensure a complete page is cached.
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Shaw whose telephone number is 703-305-0094. The examiner can normally be reached on Monday – Thursday, from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.
14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharja can be reached on 703-305-4003. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3718 for regular communications and 703-305-3718 for After Final communications.
15. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5484.

Application/Control Number: 09/602,412
Art Unit: 2141

Page 10

Joseph D. Shaw
July 10, 2003


RUPAL DHARIA
PRIMARY EXAMINER